

Name: _____ Date: _____ Period: _____

Unit 4 Test – _____ (1 pt)

40

Solve each equation. Show ALL of your work and circle your answer. If the equation is an identity, write *identity*. If it has no solution, write *no solution*. (24 points)

$4x - 9 = 19$	$2(1 - 2y) = 4y + 18$
$6x + 7 = 8x - 13$	$4p - 5 + p = 7 + 5p + 2$
$9(n + 4) = -27$	$7y + 5 - 3y = -31$
$9j + 3 = 3(3j + 1)$	$5n + 34 = -2(1 - 7n)$

$5p - 14 = 8p + 4$	$14 = -(p - 8)$
$8x - 1 = -9 + 7x$	$3(n - 1) = 5n + 3 - 2n$

A rectangular pool is twice as long as it is wide. What are the dimensions of the pool if the perimeter is 42 yd? (5 points)	

You work for a delivery service. With Plan A, you can earn \$5 plus \$.75 per delivery. With Plan B, you can earn \$7 plus \$.25 per delivery. How many deliveries must you make per hour with Plan A to earn as much as with Plan B?

(5 points – 2 for work, 1 for defining variables, 1 for equation, 1 for solution)

Variable: _____

Equation: _____ Solution: _____

A DVD club charges a monthly membership fee of \$4.95 and \$11.95 per DVD purchased. If a customer's bill for the month was \$64.70, how many DVDs did the customer purchase?

(5 points – 2 for work, 1 for defining variables, 1 for equation, 1 for solution)

Variable: _____

Equation: _____ Solution: _____